	A N	
Notice of Allowability	Application No.	Applicant(s)
	10/779,764	LEE, YUN-WEN
	Examiner	Art Unit
	GREG A. BORSETTI	2626
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS
1. 🔀 This communication is responsive to <u>Amendments received</u>	d 12/14/2009.	•
2. X The allowed claim(s) is/are <u>1, 6-7, 9, 15-16, and 19-20.</u>		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority un</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>		
2. Certified copies of the priority documents have been received in Application No.		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	of this communication to file a reply ENT of this application.	complying with the requirements
4. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give	tted. Note the attached EXAMINER's reason(s) why the oath or declara	S AMENDMENT or NOTICE OF tion is deficient.
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or in the O	ffice action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	84(c)) should be written on the drawing header according to 37 CFR 1.121(c	ngs in the front (not the back) of I).
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT F</li> </ol>	SIT OF BIOLOGICAL MATERIAL IN FOR THE DEPOSIT OF BIOLOGICA	nust be submitted. Note the AL MATERIAL.
Attachment(s)		•
1. Notice of References Cited (PTO-892)	5. Notice of Informal Pa	atent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summary	
Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date	Paper No./Mail Date 7. ☑ Examiner's Amendm	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. X Examiner's Stateme	nt of Reasons for Allowance
	9.	
/Greg A. Borsetti/ Examiner, Art Unit 2626		

Application/Control Number: 10/779,764

Art Unit: 2626

Page 2

### **DETAILED ACTION**

## Response to Amendment

- 1. Claims 1, 6-7, 9, 15-16, and 19-20 are pending.
- 2. The objections to claims 15 and 16 have been withdrawn in view of the amendments received 12/14/2009.
- 3. The 35 USC 112 1st paragraph rejections have been withdrawn in view of the amendments received 12/14/2009.

### **EXAMINER'S AMENDMENT**

4. An examiner's amendment to the record appears below. Authorization for this examiner's amendment was given in a telephone interview with Irene Lin on 1/21/2010.

Amend the application as follows:

5. In Claim 1, lines 2-3, delete,

"a speech modeling system, receiving and transferring a mixed multi-lingual speech signal into a plurality of speech features;"

and insert,

–a digital signal processing unit;

a speech modeling system, receiving and transferring a mixed multi-lingual speech signal into a plurality of speech features; –

Art Unit: 2626

6. In Claim 1, line 6, delete,

and insert,

processing unit, -

"a cross-lingual diphone model generation engine,"

-a cross-lingual diphone model generation engine executed by the digital signal

# Allowable Subject Matter

7. The following is an examiner's statement of reasons for allowance:

As per independent claims 1 and 9, the closest known prior art fails to teach alone or in fair combination the following limitations:

fixing left contexts of the multi-lingual baseforms and mapping right contexts of the multi-lingual baseforms to obtain a mapping result;

fixing right context and mapping the left contexts of the multi-lingual baseforms to obtain the mapping result if the right contexts of the multi-lingual baseforms mapping fails; and

obtaining the multi-lingual context-speech mapping data according to the mapping result.

D'Hoore teaches a multi-lingual speech recognition system but fails to teach multi-lingual mapping based on context. Burns teaches query commands to a speech recognition system. Lastly, Black teaches contextual mapping but fails to teach that the

Art Unit: 2626

left context is fixed then right mapping and if that fails then fixing the right context and mapping the left to recognize multi-lingual speech.

Dependent claims 6-7 and 19 are also considered allowable for further limiting and being dependent on independent claim 1.

Dependent claims 15-16 and 20 are also considered allowable for further limiting and being dependent on independent claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to PTO-892, Notice of References Cited for a listing of analogous art.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885. The examiner can normally be reached on Monday Thursday (8am 5pm Eastern Time).

Art Unit: 2626

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/ Examiner, Art Unit 2626

/Talivaldis Ivars Smits/ Primary Examiner, Art Unit 2626

2/3/2010